Linking forest biomass production with biomass users: A perspective from Australia

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There are large volumes of forestry based residues in Australia, currently wasted or under-utilized in a very low-value applications. In some regions, this situation has been made worse by the decrease in the strong demand for woodchips for pulp production. Use of biomass for large-scale bio-energy applications in Australia has been slow, especially in comparison with the practice in many European countries and North America. One of the main reasons for this slow uptake has historically been the abundance of fossil-fuel resources such as brown coal, black coal and natural gas. There has also been certain reluctance from parts of the community to embrace greater use of biomass for bio-energy, due to the perceptions of negative impacts on the forests. The North Coast of NSW is an example of a region where we know that there is abundant forestry biomass potentially available for energy applications. In this project we are working with forest biomass producers (forest and facility levels), energy technology providers, local communities and various levels of Government, with the aim to create opportunities for new markets to develop. The work includes a detailed assessment of resource availability (also spatially), physical characterization of the biomass, impacts of extraction at the forest level (nutrient availability, biodiversity and greenhouse emissions), as well as a cost-benefit analysis. In this presentation, I will discuss the results to date and prospects for rolling out similar engagement models across different regions in Australia.

Biography

Fabiano Ximenes is a Research Scientist with the NSW Department of Primary Industries with a Master’s in Wood Science (Australian National University). For the last 15 years his research interests have revolved around biomass and carbon in forest, wood products, and bio-energy in Australia. He has published numerous papers and technical reports, and was one of the Lead Authors of the “Harvested Wood Products” Chapter of the recently published IPCC document titled “Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol”.

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